



January 15, 2012

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Dear Dr. Burke,

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Environmental Defense Fund (EDF) would like to invite you to attend the meeting, *Identifying Environmental Dimensions of Neurological Disorders: A New Paradigm for Understanding New Federal Chemical Testing Programs*. The program will take place on June 18-19th, 2012 at the University of California at Davis, in partnership with the National Institute of Environmental Health Sciences (NIEHS)/National Toxicology Program and the U.S. Environmental Protection Agency (EPA).

Neurological disorders and diseases affect millions of people worldwide: in the US 50,000 people are diagnosed with Parkinson's disease, 1 in 100 children are diagnosed with Attention Deficit/Hyperactivity Disorder (ADHD) and continue to rise from 7.8% in 2003 to 11.1% in 2011, and in 2010, 1 in 68 children were identified with autism spectrum disorders. There is increasing recognition of the importance of environmental factors in the etiology and pathogenesis of human disorders. However, as far from fully understanding how environmental agents like chemicals impact especially the human complex endpoints such as neurological disorders and diseases, genetic factors have been estimated to explain only 20% of all cases of neurodegenerative disorders. Understanding the role of the environment is critical if we are to protect public health.

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While there are a number of documented neurotoxins, such as lead and methylmercury, there are many more chemicals suspected of disrupting normal brain function. Thousands of other chemicals are being tested at a rate of one per day. Traditional testing approaches have relied on whole animal testing (e.g., mortality, tumors, birth defects). Recent advances in scientific predictive testing approaches such as high throughput screening (HTS) evaluate upstream chemical effects, permeability of biological pathways. Over the past decade, the federal government has made significant investment in advancing HTS through the Tox21 and ToxCast initiatives. HTS hopes to dramatically expand our understanding of the chemical toxicity and filling significant data gaps.

EDF, in partnership with NIEHS and EPA, is bringing together scientists of diverse expertise to discuss opportunities and challenges for applying HTS data and research focused on neurological disorders and diseases. Detailed information is available in the recent commentary published in the January's issue of *Environmental Health Perspectives*. EDF believes the scientific research community is critical to

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further development and advancement of federal and non-federal efforts. The goals of the (1) increase the external research community's with federal initiatives and associated data and tools to support discussion and collaboration among basic government and scientists around the use of data and related research. Please find attached to the email accompanying this invitation the agenda, condensed meeting agenda.

Identification of undiscovered environmental contributors to neurological diseases and disorders requires extensive research in which data emerging from the Tox21 and ToxCast programs. We believe you would provide a unique perspective and input to this meeting, and hope that you will accept our invitation to participate.

We would appreciate your response to this invitation by January 20, 2015. Please send your direct logistical questions to Jennifer D. Heath, EDF Health Scientist, at [jennifer.d.heath@edf.org](mailto:jennifer.d.heath@edf.org). For other questions, contact Jennifer McPartland at [jmcpartland@edf.org](mailto:jmcpartland@edf.org). Additional meeting details and a final agenda will be shared closer to the meeting date.

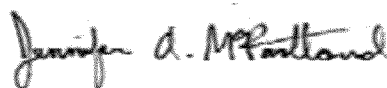
NIEHS/NTP is providing a number of travel awards to support individuals to attend this meeting. If you are interested, please visit [niehs.nih.gov/go/trvlSchlr](http://niehs.nih.gov/go/trvlSchlr) to apply. Applications for travel support are due by January 20, 2015. EDF is working to find additional support funding. If you are interested in these funds, please let us know. We will also be able to add additional funds if they become available.

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Thank you for your consideration and forward to the hearing from you.

Sincerely,

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Jennifer D. McPartland, EDF Health Scientist

EDF Health Scientist

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Sarah W. Vogel, PhD

EDF Health Program Director